

# City of Junction City Annual Drinking Water Quality Report 2007

We're very pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water.

## Why am I receiving this report?

In 1996, Congress passed amendments to the Safe Water Drinking Act that require drinking water providers to give their customers important information about their water, including where it comes from, what is in the water, and how our water quality compares with federal standards.

#### What if I have questions about my water?

This report describes our water quality, and explains what the various laboratory test results mean to our customers. If you have any questions about this report or concerning your water utility, please contact Jason Knope, Public Works Director at 998-3125 (email: jknope@ci.junction-city.or.us). We want customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled City Council meetings. They are held on the second Tuesday of each month, at 6:30 p.m. at City Hall, 680 Greenwood, Junction City.

#### Where does our water come from?

Junction City, like many small cities, relies on groundwater for its domestic water supply. The City operates four wells that contribute to our drinking water supply. These wells draw from a deep aquifer.

We have a source water protection plan available for public review at City Hall, 680 Greenwood. The Drinking Water Protection Plan was developed in 1997, and provides information such as potential sources of contamination that could affect our water supply.

#### What contaminants might be in water?

The City of Junction City routinely monitors for contaminants in your drinking water according to Federal and State laws. There were no detected constituents for the monitoring period of January 1 to December 31, 2007. The City monitors the drinking water at an annual cost of approximately \$4,300. Please feel free to use the Oregon Health Divisions web site: http://www.oregon.gov/DHS/ph/dwp/ to view our testing as well as any other water provider in the State. Our water provider ID No. is 4100418.

- Organic compounds, including synthetic and volatile organic chemicals, are by-products of gas stations, urban storm water run-off and septic systems.
- Inorganic compounds, such as salts and metals occur naturally or are caused by urban storm run-off, mining or farming.
- Herbicides and pesticides can come from a variety of sources such as agriculture, storm water run-off and
  residential uses. PCB's (polychlorinated biphenyl) are chemical compounds that can be found in environmental
  pollution.
- Radioactive material occurs naturally or can result from oil and gas production and mining activities.

Trained City personnel check the chlorine residual levels at several locations throughout the distribution system 365 days a year. As an element of our Corrosion Control Program, weekly testing of phosphate, pH, and iron levels is also conducted. By conducting these tests we are able to determine the need to increase or decrease the level of chlorine or phosphate as necessary to maintain water quality. In addition, samples are collected once a week and analyzed by an independent laboratory for Total Coliform and E.coli Bacteria.

#### How can water become contaminated?

All sources of drinking water are subject to potential contamination by substances that are naturally or man made. These substances can be microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

#### **Definitions:**

In the following tables you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Action Level (AL) - the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

Maximum Contaminant Level (MCL) - The "Maximum Allowed" is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per billion (ppb) or Micrograms per liter (mg/L) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

## Water Test Results - Regulated Substances Detected

**Inorganic Contaminants** 

Contaminant (Location)	Violation Y/N	Level Detected (Year)	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Arsenic 8 <sup>th</sup> & Deal	N	0.00344	ppb	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium 8 <sup>th</sup> & Deal	N	0.0275	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium 8 <sup>th</sup> & Deal	N	0.000680	ppm	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride 8 <sup>th</sup> & Deal	N	0107	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Contaminant (Location)	Violation Y/N	Level Detected (Year)	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Copper	N	100% of homes tested were less than the AL of 1.3	mg/l	1.3	AL = 90% of homes tested must have lead levels less than 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	N	100% of homes tested were less than the AL of 0.015	mg/l	0	AL = 90% of homes tested must have lead levels less than 0.015	Corrosion of household plumbing systems, erosion of natural deposits

#### Radioactive Contaminants

Contaminant (Location)	Violation Y/N	Level Detected (Year)	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Combined Radium (5 <sup>th</sup> & Maple)	N	(2003)	pCi/l	0	5	Erosion of natural deposits

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

## The following substances were tested for but not detected in the city's drinking water:

Microbiological Contaminants
Total Coliform Bacteria
Fecal Coliform and E.coli

<u>Disinfection By-Products (DPB) (Ground Storage)</u> Total Trihalomethanes (TTHM) Haloacetic Acids (HAA5)

#### What do these test results mean?

We constantly monitor for various constituents in the water supply to meet all regulatory requirements. As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

> Arsenic: EPA is reviewing the drinking water standard for arsenic because of special concerns that it may not be stringent enough. Arsenic is a naturally occurring mineral known to cause cancer in humans at high concentrations.

### What about people with special health problems?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

## Are there any plans to improve the water system?

As the City continues its programs to maintain a safe and dependable water supply it is necessary to make improvements in our water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. Currently the City is updating its Water Facility Master Plan. This plan will identify and prioritize future needs and upgrades to meet the water supply and demand as the population increases.

Thank You! The City of Junction City works around the clock to provide top quality water to every tap. The water system is monitored seven days a week, 365 days per year. Our Utility Crew employees are required to achieve Water Treatment I and Water Distribution II certifications through the Oregon Health Division. Should you experience any problems with your water or, just want to ask a question, please contact us. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.